WEST Search History

| Hide Items | Restore | Clear | Cancel |

DATE: Thursday, March 11, 2004

Hide?	Set Name	Query	Hit Count
		DB=USPT; PLUR=YES; OP=ADJ	
☐	L12	l7 not (l8 or l10)	20
☐	L11	l7 and l8	8
☐	L10	l3 same (gateway$ or (gate way$))	3
☐	L9	l3 same (wap or ((wireless$ or (wire less$)) adj (application$ or access$) adj protocol$))	2
☐	L8	l3 and (wap or ((wireless$ or (wire less$)) adj (application$ or access$) adj protocol$))	13
☐	L7	l3 and (gateway$ or (gate way$))	31
☐	L6	l3[ti,ab]	19
☐	L5	l3 and l4	35
☐	L4	(709/217 or 709/218 or 709/219 or 707/1 or 707/10 or 707/2).ccls.	7329
☐	L3	L2 same (wireless$ or (wire less$) or palm$ or laptop$ or (lap top$) or portab$ or pda or (personal$ adj digital$ adj assist$) or infrared$ or blackberry or (black berry) or bluetooth or (blue tooth))	307
☐	L2	L1 same ((remot$ or external$) near2 (data or datum or information or stor$ or memor$ or referenc$))	5989
☐	L1	local$ near2 (data or datum or information or stor$ or memor$ or referenc$)	41136

END OF SEARCH HISTORY

(12) **United States Patent**
Sherman et al.

(10) Patent No.: **US 6,647,409 B1**
(45) Date of Patent: **Nov. 11, 2003**

(54) **MAINTAINING A SLIDING VIEW OF SERVER BASED DATA ON A HANDHELD PERSONAL COMPUTER**

(75) Inventors: **Roman Sherman**, Bellevue, WA (US); **David C. Whitney**, Bellevue, WA (US)

(73) Assignee: **Microsoft Corporation**, Redmond, WA (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **09/352,279**

(22) Filed: **Jul. 13, 1999**

(51) Int. Cl.^{7} **G06F 15/16**
(52) U.S. Cl. **709/203**
(58) Field of Search 709/203, 206, 709/207
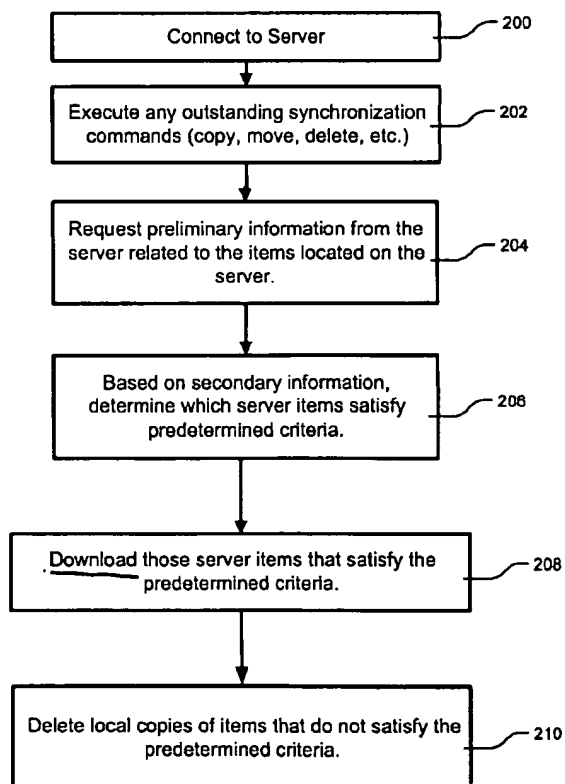
(56) **References Cited**

U.S. PATENT DOCUMENTS

5,862,452 A * 1/1999 CuLak et al.
6,034,963 A * 3/2000 Minami et al.
6,058,106 A * 5/2000 Cudak et al. 370/313
6,088,337 A * 7/2000 Eastmond et al. 370/280
6,275,850 B1 * 8/2001 Beyda et al. 709/206

* cited by examiner

Primary Examiner—David Y. Eng
(74) *Attorney, Agent, or Firm*—Merchant & Gould P.C.

(57) **ABSTRACT**

A handheld client computing system selectively retrieves items, such as email messages, from a server through either a POP transport or an IMAP transport and selectively maintains the items on the client. The retrieval and maintenance is based on predetermined criteria, such as predetermined date, size or keyword information. Initially, the H/PC (handheld personal computer) downloads item identification information from the server on the client/server network and determines which items are not present on the H/PC. Those items located on the server and not on the H/PC are selected for possible downloading to the H/PC. However, before each item is downloaded to the H/PC in its entirety, the H/PC downloads only the header of the selected item. The header information is analyzed to determine whether to download the entire item based on predetermined criteria, such as date information. Once all server-based items are analyzed, and selected items are downloaded, all local copies of items, that do not satisfy the predetermined criteria, are deleted to maintain a sliding or selective view of the server-based items belonging to the client account.

10 Claims, 8 Drawing Sheets

Connect to Server — 200

Execute any outstanding synchronization commands (copy, move, delete, etc.) — 202

Request preliminary information from the server related to the items located on the server. — 204

Based on secondary information, determine which server items satisfy predetermined criteria. — 206

Download those server items that satisfy the predetermined criteria. — 208

Delete local copies of items that do not satisfy the predetermined criteria. — 210

Start Loop Body ⟶ 224

220

Is the Server Item in the Local List? — 226

Is the Local Item's date in range? — 228

Yes

No

Request Header of the Item from Server — 234

Mark Item for Preservation

230

Yes

No

Is Server Item's date in range? — 236

No

Yes — 238

Download Item from Server

Mark Item for Preservation — 240

End Loop Body — 232

Fig. 6

☐ Generate Collection   Print

L12: Entry 4 of 20   File: USPT   Nov 11, 2003

DOCUMENT-IDENTIFIER: US 6647409 B1
TITLE: Maintaining a sliding view of server based data on a handheld personal computer

Detailed Description Text (3):
The computer system or H/PC 22 is also connectable to a desktop personal computer (PC) 26 as a companion device, wherein the desktop PC connects to the server 24. The server 24 is either an Internet server or an Intranet server which sends and receives electronic items such as electronic mail messages (email) 27, through various connections or gateways to other computer systems, such as an Internet email server 28, an Intranet server 30 and/or another desktop PC 32. The server 24 receives email messages from the other computing systems 28, 30 and 32 and stores these email messages for the user of the H/PC 22 and the PC 26 in an account dedicated to that user.

Detailed Description Text (6):
FIG. 2 and the following discussion under this subheading are intended to provide a brief general description of a suitable computing environment in which the invention may be implemented. Although not required, the invention is described in the general context of computer executable instructions of programs being executed by the H/PC 22. Generally, programs include routines, programs, objects, components, data structures, etc. that perform particular tasks or implement particular abstract data types. Moreover, those skilled in the art will appreciate that the invention may be practiced with other computer system configurations, such as laptop PCs, desktop PCs, multiprocessor systems, micro-processor based or programmable consumer electronics, network PCs, mini computers, main frame computers and the like. The invention may also be practiced in distributed computing environments where tasks are performed by remote processing devices that are linked through a communications network in a distributed computing environment, programs may be located in both local and remote memory storage devices.

US006646564B1

(12) **United States Patent**   (10) **Patent No.:**   **US 6,646,564 B1**
Azieres et al.   (45) **Date of Patent:**   **Nov. 11, 2003**

(54) **SYSTEM AND METHOD FOR REMOTE MANAGEMENT OF EQUIPMENT OPERATING PARAMETERS**

(75) Inventors: **Renaud Azieres, Paris (FR); Pascal Favier, Paris (FR)**

(73) Assignee: **L'Air Liquide Societe Anonyme a Directoire et Conseil de Surveillance pour l'Etude et l'Exploitation des Procedes Georges Claude, Paris (FR)**

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **09/988,673**

(22) Filed: **Nov. 20, 2001**

Related U.S. Application Data

(60) Provisional application No. 60/273,551, filed on Mar. 7, 2001.

(51) Int. Cl.[7] **G08B 21/00**
(52) U.S. Cl. **340/679; 340/506; 701/108; 701/174**
(58) Field of Search 340/679, 500, 340/501, 506, 511, 3.1, 539.22, 539.24, 3.43; 700/108, 110, 111, 174, 175

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,847,894 A * 7/1989 Chanvin et al. 279/104

5,225,997 A * 7/1993 Lederer et al. 364/550
5,460,006 A * 10/1995 Torimitsu 340/585
5,946,922 A * 9/1999 Viard et al. 62/126
6,097,429 A * 8/2000 Seeley et al. 348/154
6,437,691 B1 * 8/2002 Sandelman et al. 340/506

* cited by examiner

Primary Examiner—Toan Pham
(74) Attorney, Agent, or Firm—Burns, Doane, Swecker & Mathis, L.L.P.

(57) **ABSTRACT**

The present invention is directed toward providing a system for the remote monitoring and control of operating equipment. Through a series of sensors located on or near the equipment, a plurality of operating and production parameters are read and metered. Should any of the readings exceed predetermined levels, an alarm signal is triggered, thereby notifying service personal located remote from the equipment site. Through the automated resources at the monitoring site, the system automatically logs the readings, events, and alarms; communicates alarms to the appropriate personnel dependent upon the nature of the alarm, the type of equipment involved, and the location of the equipment. Service and maintenance information and aids are available to personnel at the equipment site through a communication network to the remote monitoring site. Based on the alarm condition and equipment readings from the sensors, the system can automatically transmit commands to adjust the operating controls on the equipment to resolve the alarm condition.

23 Claims, 2 Drawing Sheets
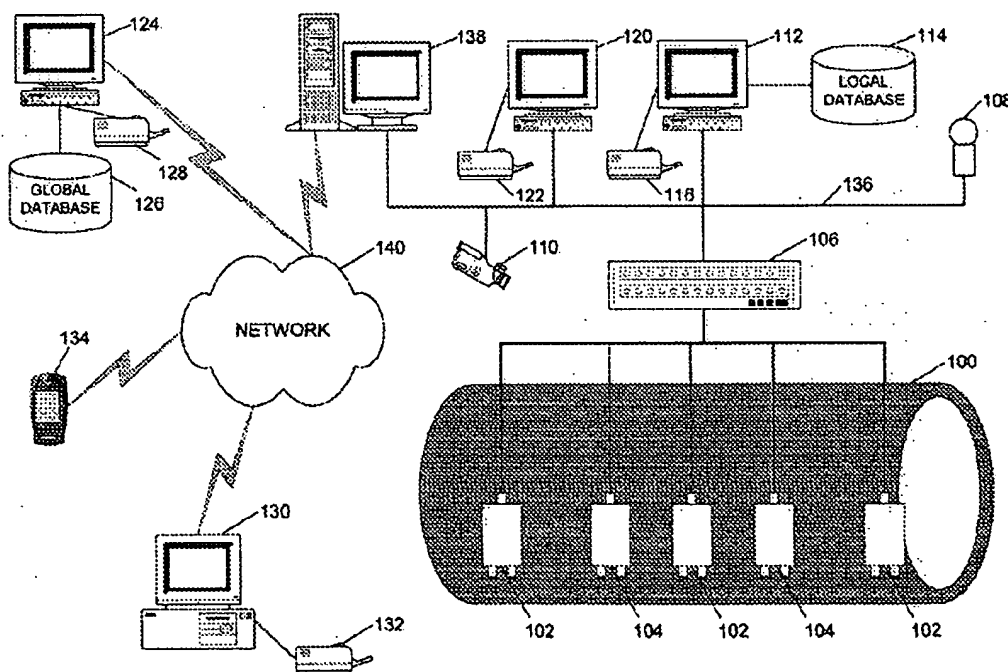
☐ | Generate Collection | | Print |

L8: Entry 6 of 13   File: USPT   Nov 11, 2003

DOCUMENT-IDENTIFIER: US 6646564 B1
TITLE: System and method for remote management of equipment operating parameters

Detailed Description Text (3):
Each of the sensors 102 transmits its generated signals into a programmable logic
controller 106. The programmable logic controller 106 serves as an intelligent
portal on a network 136 through which the signals from the sensors 102 pass to be
stored on a local database 114 or transmitted across various networks 136 or 140
for storage on a remote global database 126 and for viewing by various equipment
operator, monitor, and maintenance personnel on personal computers, terminals, and
workstations 112, 120, 124, and 130. Additionally, with the expanding capabilities
of personal digital assistants (hereinafter "PDA") and mobile telephone handsets
(the PDA's and mobile phones being hereinafter collectively referred to as
"portable devices"), sensor signals can also be transmitted to and accessed by
means of such devices 134. The controller 106 includes a processor that can be
programmed to detect when a reading from a sensor 102 violates or exceeds a
predetermined range or standard for the particular parameter being sensed, at which
time the programmable logic controller 106 can activate a local alarm 108 and can
automatically generate alarm signals or warning messages to be transmitted to
various monitoring terminals, such as a personal computer 112 on the network 136
and located near the equipment 100; a workstation 120 located within the enterprise
and accessible via the network 136; a remote personal computer 124 accessible via
the network 140 for maintaining a remote global database 126; a work station,
computer, or terminal 130 accessible via the network 140 for possibly being a call
center; and portable devices 134 accessible via the network 140. Each of the
devices residing on the network 140, if properly authorized, can receive sensor
data from the programmable logic controller 106 through a secure access server 138.

Detailed Description Text (5):
The aforementioned networks 136 and 140 can be any combination of hard-wired and
wireless networks, including local area networks, wide area networks, private
networks, public networks, intranets, extranets, and the Internet. Access across
the networks can be through a dial-up telephone line, a wireless link, a hard-wired
connection, or any combination thereof. Remote access to the system is available by
any number of known communication protocols, including wireless (receipt of Short
Message System messages on mobile telephone handsets, hereinafter "SMS"), Wireless
Application Protocol (hereinafter "WAP"), and wireless Internet (Bluetooth). For
those networked users who lack direct or dedicated computer access to the
information network provided by the invention, the controller 106 can be programmed
to format and transmit email messages to predetermined and identified users to so
inform these users of relevant operating or alarm conditions occurring on the
equipment 100. Alternatively, any of the computers 112, 120, 124, 130, or 134 can
include the feature of being able to automatically forward information received
from the controller 106 to users in the form of email messages.

Detailed Description Text (22):
If a sensor 102 is identified in the local database 114 or the controller 106 as a
critical sensor within the equipment 100, such as would be the case in the above
example of a conveyer belt temperature sensor, the controller 106 processes the

US006584095B1

(12) **United States Patent**
Jacobi et al.

(10) Patent No.: **US 6,584,095 B1**
(45) Date of Patent: **Jun. 24, 2003**

(54) **METHOD AND SYSTEM FOR SUPPORTING WIRELESS COMMUNICATIONS WITHIN AN INTERNETWORK**

(75) Inventors: **Eli Jacobi**, Palo Alto, CA (US); **Markku Korpi**, Starnberg (DE); **Peter Kozdon**, Santa Clara, CA (US)

(73) Assignee: **Siemens Information & Communication Networks, Inc.**, Boca Raton, FL (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **09/057,352**

(22) Filed: **Apr. 8, 1998**

(51) Int. Cl.[7] H04L 12/56; H04L 12/66
(52) U.S. Cl. 370/352; 370/389
(58) Field of Search 370/389, 352, 370/390, 355, 386, 485, 400, 354, 356, 261, 401, 404

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,590,175 A		12/1996	Gallant et al. 379/58
5,592,154 A	*	1/1997	Lin et al. 340/825.5
5,659,544 A		8/1997	La Porta et al. 370/312
5,726,984 A		3/1998	Kubler et al.
5,845,090 A	*	12/1998	Collins, III et al. 985/200.51
6,011,792 A	*	1/2000	Miloslavsky 370/352
6,075,783 A	*	6/2000	Voit 370/352
6,119,003 A	*	9/2000	Kukkohovi 455/435
6,125,113 A	*	9/2000	Farris et al. 370/389
6,134,587 A	*	10/2000	Okanoue 709/222
6,205,139 B1	*	3/2001	Voit 370/389
6,208,639 B1	*	3/2001	Murai 370/356

FOREIGN PATENT DOCUMENTS

EP   0 758 189 A2   2/1997

EP   0 828 398 A1   3/1998

OTHER PUBLICATIONS

Wong and Halsall "Mobile Computing in a LAN Environment," *IEEE*, pp. 1116–1120, May 1, 1994.

Eng et al. "A wireless broadband ad–hoc ATM local–area network," *Wireless Networks*, 1(1995) Jul., No. 2, pp. 161–173.

Cohen and Postel "IP Addressing and Routing in a Local Wireless Network," *IEEE*, pp. 626–632, 1992.

Mascoli et al. "Alternative Scenarios for Data Applications Via Internet–Mobile and DECT–ATM Interworking." *IEEE*, pp. 788–792, Jun. 11, 1995.

* cited by examiner

Primary Examiner—Alpus H. Hsu
Assistant Examiner—Toan Nguyen

(57) **ABSTRACT**

A system and method for supporting communications among multiple interconnected networks include assigning multiple dynamic telephony addresses to each wireless communication device that registers in more than one network. The networks assign the addresses independently of each other. When an incoming call is directed to a particular wireless device via a first network, if the wireless device is beyond the transmission range of the first network, a locate-wireless-communication-device message may be single-cast, multicast or broadcast to remote networks, with instructions to return dynamic telephony addresses assigned to the device. While the telephony addresses are different in each network, each wireless device is associated with a device identifier that is universally applied in the internetwork. Upon receiving a telephony address from a remote network, the address is stored in local memory at the first network, thereby allowing access for subsequent incoming calls.

15 Claims, 4 Drawing Sheets
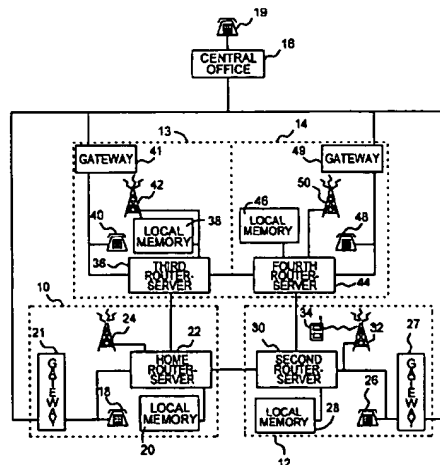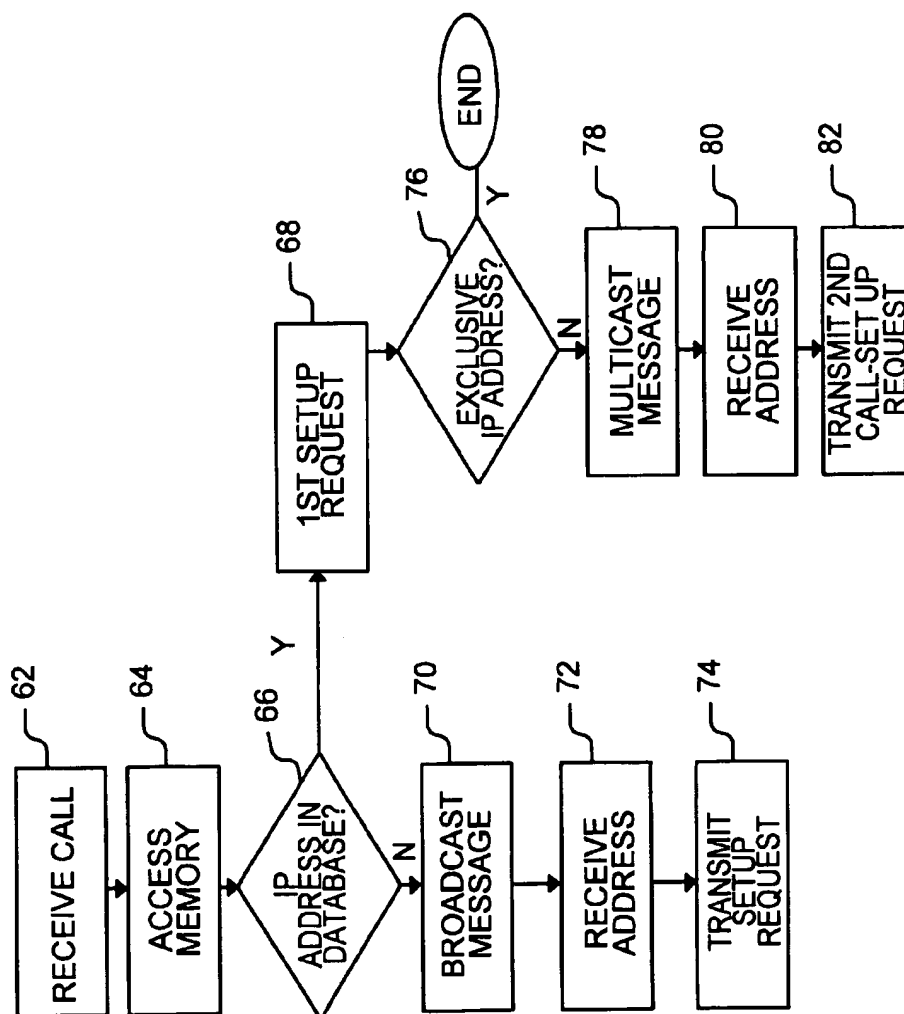
FIG. 5

First Hit   Fwd Refs

☐ Generate Collection   Print

L12: Entry 9 of 20   File: USPT   Jun 24, 2003

DOCUMENT-IDENTIFIER: US 6584095 B1
TITLE: Method and system for supporting wireless communications within an
internetwork

Detailed Description Text (2):
With reference to FIG. 1, a system for supporting wireless communication among
multiple interconnected networks includes a home network 10 such as a 10 Base-T
local area network (LAN) connected to a second LAN 12, a third LAN 13, and a fourth
LAN 14. Each LAN includes its own router-server and wireless base station. Each
router-server is equipped with the same capabilities for establishing wireless
communication links. The home LAN 10 includes a home local memory 20, a home
router-server 22, a home IP telephone 18, a home gateway 21, and a home wireless
base station 24. The second LAN 12 includes a second local memory 28, a second
router-server 30, a second IP telephone 26, a second gateway 27, and a second
wireless base station 32. The third LAN 13 includes a third local memory 38, a
third router-server 36, a third IP telephone 40, a third gateway 41, and a third
wireless base station 42. The fourth LAN 14 includes a fourth local memory 46, a
fourth router-server 44, a fourth IP telephone 48, a fourth gateway 49, and a
fourth wireless base station 50.

Detailed Description Text (5):
Returning to FIG. 1, once the cellular phone 34 has registered with the second
router-server 30, the second router server 30 is able to independently establish a
connection between the cellular phone 34 and other communication devices, such as
the second IP telephone 26 or the remotely located telephone 19. That is, the
second LAN 12 is able to function as a "temporary home" LAN for calls that are
intended for the cellular telephone 34 and that are linked directly through the
second router-server 30. Provided that the cellular telephone 34 is within the
transmission range of the second wireless base station 32, the second router-server
30 is capable of establishing the wireless communication link between the cellular
telephone 34 and the second IP telephone 26 without accessing registration data
from a source outside of the second LAN 12, such as the home LAN 10. The second
router-server 30 locally accesses the second dynamic IP-telephony address from the
second local memory 28 in response to the incoming call and transmits a call-setup
signal with the second dynamic IP-telephony address to the second wireless base
station 32. The second wireless base station 32 wirelessly transmits a call-setup
message to the cellular telephone 34 to establish the wireless connection. The
second router-server 30 is able to establish a wireless communication link between
the cellular telephone 34 and the remotely located telephone 19 in the same manner,
provided that the call from the remotely located telephone 19 is directed to the
cellular phone 34 via the second gateway 27 and the second router-server 30.

Detailed Description Text (7):
The dynamic IP-telephony addresses enable the LANs 10, 12, 13 and 14 to use single-
cast, multicast and broadcast approaches to efficiently locate the cellular phone
34 when the cellular phone 34 is within a transmission range of a wireless base
station located on a remote LAN. As an example, it may be assumed that the user of
the cellular phone is also the user of the third IP telephone 40 and that the
remotely located telephone 19 has placed a call to the third IP telephone 40 on the
third LAN 13 via the third gateway 41. The cellular phone 34 was previously

US006574239B1

(12) **United States Patent**
Dowling et al.

(10) Patent No.: **US 6,574,239 B1**
(45) Date of Patent: **Jun. 3, 2003**

(54) **VIRTUAL CONNECTION OF A REMOTE UNIT TO A SERVER**

(76) Inventors: **Eric Morgan Dowling**, 1132 W. Lookout Dr., Richardson, TX (US) 75080; **Mark Nicholas Anastasi**, 405 Copperas Trail, Highland Village, TX (US) 75077

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **09/167,698**

(22) Filed: **Oct. 7, 1998**

(51) Int. Cl.^{7} H04J 3/00
(52) U.S. Cl. 370/469; 370/329
(58) Field of Search 370/329, 389, 370/468, 469; 709/203, 206, 227

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,285,061 A	8/1981	Ho
4,416,015 A	11/1983	Gitlin
4,489,416 A	12/1984	Stuart
4,578,796 A	3/1986	Charalambous et al.
4,852,151 A	7/1989	Dittakavi et al.
4,995,074 A	2/1991	Goldman et al.
5,127,051 A	6/1992	Chan et al.
5,287,401 A	2/1994	Lin
5,321,722 A	6/1994	Ogawa
5,367,563 A	11/1994	Sainton
5,519,767 A	5/1996	O'Horo
5,600,712 A	2/1997	Hanson et al.
5,751,796 A	5/1998	Scott et al.
5,757,890 A	5/1998	Venkatakrishnan
5,771,353 A *	6/1998	Eggleston et al. 709/227
5,896,444 A	4/1999	Perlman et al.
5,903,602 A	5/1999	Torkkel
5,958,006 A *	9/1999	Eggleston et al. 709/206
6,023,493 A	2/2000	Olafsson
6,101,531 A *	8/2000	Eggleston et al. 709/206
6,308,281 B1	10/2001	Hall, Jr. et al.
6,317,455 B1	11/2001	Williams et al.
6,426,946 B1	7/2002	Takagi et al.

FOREIGN PATENT DOCUMENTS

|		
WO	WO 99/27702	6/1999

* cited by examiner

Primary Examiner—Salvatore Cangialosi
(74) *Attorney, Agent, or Firm*—Eric M. Dowling

(57) **ABSTRACT**

A method is provided for reconnecting a telephone modem with a reduced delay by reducing a time associated with retraining. A wireline communication connection is initialized by a telephone modem to train a set of parameters. The parameters are stored in a memory structure. The connection is used for communication, and is then terminated. At a later time, the connection is reestablished by accessing the parameters from memory and using them to reconnect the modem with a reduced set-up delay. Another method involves coupling to a first physical layer and establishing a session with a server, and then decoupling from the first physical layer while maintaining the session. Later, the session is resumed using a second physical layer. At least one of the physical layers involves a local interface unit that includes a landline connection to a WAN.

75 Claims, 4 Drawing Sheets
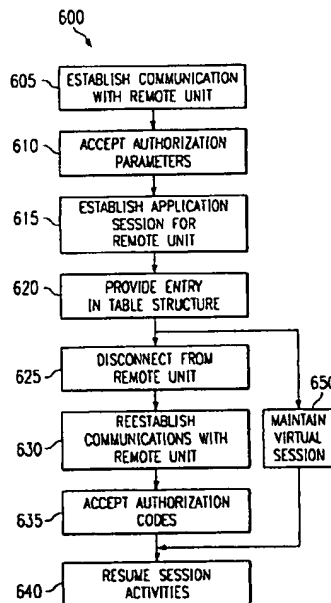
First Hit   Fwd Refs

☐ ▨ Generate Collection ▨ Print

L12: Entry 10 of 20   File: USPT   Jun 3, 2003

DOCUMENT-IDENTIFIER: US 6574239 B1
TITLE: Virtual connection of a remote unit to a server

Brief Summary Text (7):
In the above scenario, a mobile worker must interact with a central server during
the course of a day. The worker may wish to access the central server while
visiting a patient. The worker may also wish to access the server from a location
where only a wireless connection can be established. From a performance
perspective, an ideal solution is to provide the mobile worker with a wireless
connection from a remote unit to a central server. Such a wireless connection could
be established via a high-powered radio connection with a broad area of coverage or
via an existing cellular or personal communication system (PCS) network. Solutions
using high-powered radio links have the disadvantage that costly spectrum may be
required. Maintaining a link on a cellular or PCS system is expensive in that a
continuous connection consumes billable airtime which is also very costly. From an
airtime-cost perspective, an ideal solution would be to force the worker to create
a connection, download or up load information, and work locally with data on the
remote unit as often as possible. This solution is tedious, and while saving
airtime costs, may actually represent the more costly solution when professional
service costs are factored in. This method has the added disadvantage that when
files are uploaded or downloaded the data must be synchronized in case another user
has changed the data in parallel with the mobile worker. Alternatively, other users
must be "locked out" of the file from the time the mobile user downloads it until
it is finally uploaded with any changes made. This is the problem solved using
semaphores in shared memory systems. In the context of the present invention, a
"file semaphore" is a semaphore used to lock a second user out of a file while a
first user is using it. Due to the aforementioned reasons, in many applications
forcing the worker to repeatedly connect, disconnect, upload and download
information is unacceptable.

Detailed Description Text (20):
The communication server 212 may also be configured to provide additional types of
connections, such as packet based voice and video connections according to the
H.323 international standard. In such an embodiment, the communication server 212
provides a gateway function passing calls between the public switched telephone
network and a network such as the Internet. The communication server 212 may also
provide other communications services such as voice mail, email, fax-mail, call
distribution and the like. In systems involving Internet telephony, the
communication server may operate only using packet protocols and not include an
interface for circuit switched connections.

US006055512A

United States Patent [19]

Dean et al.

[11] **Patent Number:** 6,055,512

[45] **Date of Patent:** Apr. 25, 2000

[54] **NETWORKED PERSONAL CUSTOMIZED INFORMATION AND FACILITY SERVICES**

[75] Inventors: **Robert John Dean; Brian Michael Unitt; Yashvant Kanabar**, all of Bishops Stortford, United Kingdom; **Daniel Vincent McCaughan**, Hollywood, Ireland

[73] Assignee: **Nortel Networks Corporation**, Montreal, Canada

[21] Appl. No.: **08/889,602**

[22] Filed: **Jul. 8, 1997**

[51] Int. Cl.[7] **G06F 17/60**

[52] U.S. Cl. 705/17; 395/200.31; 395/200.32; 395/200.47; 395/200.48; 705/26; 705/27

[58] Field of Search 705/1, 17, 26, 705/27; 395/200.31, 200.32, 200.47, 200.48

[56] **References Cited**

U.S. PATENT DOCUMENTS

3,555,196	1/1971	Singer	379/207
3,771,139	11/1973	Digby	711/108
4,202,041	5/1980	Kaplow et al.	341/26
4,707,853	11/1987	Hasegawa	379/221
4,763,354	8/1988	Fukushima et al.	379/165
4,765,666	8/1988	Bergeron	463/25
4,935,956	6/1990	Hellwarth et al.	379/112
5,048,085	9/1991	Abraham et al.	380/25
5,065,429	11/1991	Lang	380/25
5,148,481	9/1992	Abraham et al.	380/46
5,195,130	3/1993	Weiss et al.	379/93.13
5,231,634	7/1993	Giles et al.	370/348
5,339,239	8/1994	Manabe et al.	705/1
5,422,953	6/1995	Fischer	380/23

(List continued on next page.)

FOREIGN PATENT DOCUMENTS

0 810 538	3/1997	European Pat. Off. .	
2638002	of 1988	France	G06K 19/073
4213797A1	10/1993	Germany	G06K 19/06
62-113267	5/1987	Japan .	
5-89302	4/1993	Japan .	

OTHER PUBLICATIONS

Balch, Karen, Varbusiness, No. 815, 86, "It's in the Cards.", Oct. 1, 1992.

McKie, Stewart, DBMS, vol. 9, No. 7, p. 42, "The Informix Enterprise Strategy.", Jun. 1996.

AT&T Direct Service, 108–17, AT&T May 1996.

AT&T Enhanced Customer Services, COL Jul. 1996.

Primary Examiner—James P. Trammell
Assistant Examiner—Nicholas David Rosen
Attorney, Agent, or Firm—Lee, Mann, Smith, McWilliams, Sweeney & Ohlson

[57] **ABSTRACT**

A service terminal facility is provided at a public access location, for example in a hotel, hospital or airport, the service terminal facility available for providing electronic information services to users, in response to input of a portable data storage medium, for example a smart card or the like. A smart card contains stored data describing user specified information such as contacts names, personal details and medical information and personal interest information. The service terminal comprises a search engine for searching the user data and comparing data types within the user data with general data stored locally at the service terminal. The service terminal selects data corresponding to data types specified in the user data and displays these on the graphical user interface at the service terminal, or at a user interface connected with the service terminal. The user data may specify one or more data sources or service providers from which electronic data services of interest to the user can be obtained. The service terminal may obtain listings of data from remote data sources and/or service providers and display these on the graphical user interface and/or user interface. The user may instruct downloading of electronic data or electronic information services from remote data sources or service providers from the service terminal for delivery to the graphical user interface or the user interface.

7 Claims, 10 Drawing Sheets
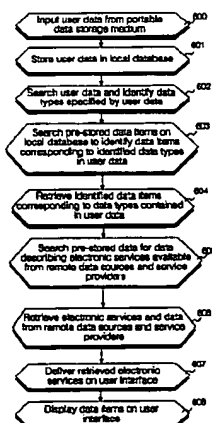
☐ �▓▓▓▓ Generate Collection ▓▓▓▓ | Print

L12: Entry 18 of 20   File: USPT   Apr 25, 2000

DOCUMENT-IDENTIFIER: US 6055512 A
TITLE: Networked personal customized information and facility services

<u>Abstract Text</u> (1):
A service terminal facility is provided at a public access location, for example in
a hotel, hospital or airport, the service terminal facility available for providing
electronic information services to users, in response to input of a <u>portable</u> data
storage medium, for example a smart card or the like. A smart card contains stored
data describing user specified information such as contacts names, personal details
and medical information and personal interest information. The service terminal
comprises a search engine for searching the user data and comparing data types
within the user data with general <u>data stored locally</u> at the service terminal. The
service terminal selects data corresponding to data types specified in the user
data and displays these on the graphical user interface at the service terminal, or
at a user interface connected with the service terminal. The user data may specify
one or more data sources or service providers from which electronic data services
of interest to the user can be obtained. The service terminal may obtain listings
of <u>data from remote data</u> sources and/or service providers and display these on the
graphical user interface and/or user interface. The user may instruct downloading
of electronic data or electronic <u>information services from remote data</u> sources or
service providers from the service terminal for delivery to the graphical user
interface or the user interface.

<u>Detailed Description Text</u> (9):
The service terminal facility comprises a service terminal device 100; a plurality
of user interfaces for example telephone handsets 101, and video monitors 102; and
a plurality of <u>gateway</u> devices for example private branch exchange apparatus 103,
and cable TV access device 104. The <u>gateway</u> devices connect to appropriate
corresponding remote data sources such as may be available through a public
switched telephone network 105, or a cable TV network 106 from which electronic
data and/or electronic services are obtained, a satellite TV Terminal, or an on-
line service provider service apparatus, for example such as provided by
Compuserve .RTM.. The service terminal device may connect directly to individual
data sources, for example via a wide area network 107, or the internet 108.
Typically the service terminal 100 may be provided in a public access location, eg
a hotel reception or hospital reception area, whereas the user interfaces may be
provided in restricted locations, such as a hotel room or a hospital room. The
portable data storage means 109 suitably comprises a smart card pre-loaded with the
user specific data or with remote access data describing remote locations at which
user specific data is stored, together with any passwords, keywords or encryption
data enabling access to that remotely stored user specific data, and is of a size
and shape such as can be carried conveniently by a user in a wallet or purse and
uses smart card technology which is conventional in the art.

<u>Detailed Description Text</u> (10):
Referring to FIG. 2 herein, the service terminal device 100 comprises a card reader
data input port 200; a processor 201, with associated memory 202; a data storage
means 203 storing data base information; a graphical user interface 204 for
inputting instructions and monitoring services and data provided by the facility;
and an interface 205 for communicating directly with a plurality of data sources